

# Steel Investment Foundries: 2002

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## 2002 Economic Census

*Manufacturing*

Industry Series



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U.S. Department of Commerce  
Economics and Statistics Administration  
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-- Not applicable for this report.

**Table 1. Historical Statistics for the Industry: 2002 and Earlier Years**

[Data based on the 2002 Economic Census and the 2002 Annual Survey of Manufactures (ASM). For information on confidentiality protection, sampling error, nonsampling error, and explanation of terms, see note at end of table. For meaning of abbreviations and symbols, see introductory text]

Industry and year <sup>1</sup>	Com- panies <sup>2</sup>	All estab- lish- ments <sup>3</sup>	All employees		Production workers			Value added (\$1,000)	Total cost of materials (\$1,000)	Total value of shipments (\$1,000)	Total capital expendi- tures (\$1,000)
			Number <sup>4</sup>	Payroll (\$1,000)	Number <sup>4</sup>	Hours (1,000)	Wages (\$1,000)				
331512, Steel investment foundries . . . . . 2002..	132	146	16 420	571 464	12 801	25 252	399 628	1 429 418	685 599	2 128 576	79 606
2001..	N	N	21 907	742 610	17 086	36 783	535 743	1 852 931	956 873	2 814 833	95 010
2000..	N	N	22 318	741 660	17 521	36 564	542 010	1 849 679	935 005	2 795 735	95 890
1999..	N	N	22 521	723 523	18 049	36 331	526 901	1 857 538	856 089	2 718 757	91 890
1998..	N	N	22 282	707 848	18 063	35 367	526 073	1 732 756	711 634	2 445 360	70 916
1997..	145	159	22 673	669 452	18 385	36 870	494 655	1 656 130	715 264	2 341 737	76 396

<sup>1</sup>Statistics presented for years ending in 2 and 7 are census data. Interim census years are derived in a representative sample of manufacturing establishments canvassed in the Annual Survey of Manufactures (ASM).

<sup>2</sup>For the census, a company is defined as a business organization consisting of one establishment or more under common ownership or control.

<sup>3</sup>Includes establishments with payroll at any time during the year.

<sup>4</sup>Number of employees figures represent average number of production workers for pay period that includes the 12th of March, May, August, and November plus other employees for payroll period that includes the 12th of March.

Note: The data in this table are based on the 2002 Economic Census and the 2002 Annual Survey of Manufactures (ASM). To maintain confidentiality, the Census Bureau suppresses data to protect the identity of any business or individual. The census results in this table contain sampling errors and nonsampling errors. Data users who create their own estimates using data from American FactFinder tables should cite the Census Bureau as the source of the original data only. For explanation of terms, see Appendix A. For full technical documentation, see Appendix C.

**Table 2. Industry Statistics for Selected States: 2002**

[States that are a disclosure or with less than 100 employees are not shown. Data based on the 2002 Economic Census. For information on confidentiality protection, nonsampling error, explanation of terms, and geographical definitions, see note at end of table. For information on geographic areas followed by \*, see Appendix D. For meaning of abbreviations and symbols, see introductory text]

Industry and geographic area	E <sup>1</sup>	All establishments <sup>2</sup>		All employees		Production workers			Value added (\$1,000)	Total cost of materials (\$1,000)	Total value of shipments (\$1,000)	Total capital expenditures (\$1,000)
		Total	With 20 employees or more	Number <sup>3</sup>	Payroll (\$1,000)	Number <sup>3</sup>	Hours (1,000)	Wages (\$1,000)				
331512, Steel investment foundries												
United States.....	—	146	108	16 420	571 464	12 801	25 252	399 628	1 429 418	685 599	2 128 576	'79 606
Alabama.....	—	3	2	345	10 712	272	597	6 155	28 423	10 527	39 079	4 094
California.....	—	15	12	1 657	46 564	1 279	2 405	30 814	147 509	44 120	191 496	'5 923
Indiana.....	—	7	6	1 203	48 610	920	2 098	31 226	92 286	50 826	141 957	'2 911
Michigan.....	—	14	11	1 584	54 125	1 327	3 080	41 530	208 348	96 602	303 734	'9 226
Ohio.....	1	15	12	1 509	53 679	1 077	2 299	41 476	152 337	86 343	236 361	'9 903
Pennsylvania.....	1	10	7	578	17 602	491	946	13 611	44 521	18 085	61 738	'1 311
Texas.....	—	15	11	1 715	51 271	1 387	2 281	38 889	112 331	57 534	169 467	'4 156
Wisconsin.....	—	11	10	1 411	44 144	1 153	2 173	29 929	104 065	44 661	148 596	'10 855

<sup>1</sup>Some payroll and sales data for small single-establishment companies with up to 20 employees (cutoff varied by industry) were obtained from administrative records of other government agencies rather than from census report forms. These data were then used in conjunction with industry averages to estimate statistics for these small establishments. This technique was also used for a small number of other establishments whose reports were not received at the time data were tabulated. The following symbols are shown where estimated data account for 10 percent or more of the figures shown: 1—10 to 19 percent; 2—20 to 29 percent; 3—30 to 39 percent; 4—40 to 49 percent; 5—50 to 59 percent; 6—60 to 69 percent; 7—70 to 79 percent; 8—80 to 89 percent; 9—90 percent or more.

<sup>2</sup>Includes establishments with payroll at any time during the year.

<sup>3</sup>Number of employees figures represent average number of production workers for pay period that includes the 12th of March, May, August, and November plus other employees for payroll period that includes the 12th of March.

Note: The data in this table are based on the 2002 Economic Census. To maintain confidentiality, the Census Bureau suppresses data to protect the identity of any business or individual. The census results in this table contain nonsampling errors. Data users who create their own estimates using data from American FactFinder tables should cite the Census Bureau as the source of the original data only. For explanation of terms, see Appendix A. For full technical documentation, see Appendix C. For geographical definitions, see Appendix D.

**Table 3. Detailed Statistics by Industry: 2002**

[Data based on the 2002 Economic Census and the 2002 Annual Survey of Manufactures (ASM). For information on confidentiality protection, sampling error, nonsampling error, and explanation of terms, see note 2 at end of table. For meaning of abbreviations and symbols, see introductory text]

Item	Value
<b>331512, Steel investment foundries</b>	
Companies <sup>1</sup> .....	number.. 132
All establishments <sup>2</sup> .....	number.. 146
Establishments with 1 to 19 employees .....	number.. 38
Establishments with 20 to 99 employees .....	number.. 70
Establishments with 100 employees or more .....	number.. 38
All employees <sup>3</sup> .....	number.. 16 420
Total compensation .....	\$1,000.. 744 597
Annual payroll .....	\$1,000.. 571 464
Total fringe benefits .....	\$1,000.. 173 133
Production workers, average for year .....	number.. 12 801
Production workers on March 12 .....	number.. 13 548
Production workers on May 12 .....	number.. 13 080
Production workers on August 12 .....	number.. 12 404
Production workers on November 12 .....	number.. 12 152
Production worker hours .....	1,000.. 25 252
Production worker wages .....	\$1,000.. 399 628
Total cost of materials .....	\$1,000.. 685 599
Materials, parts, containers, packaging, etc., used .....	\$1,000.. 527 622
Resales .....	\$1,000.. 9 573
Purchased fuels .....	\$1,000.. 17 994
Purchased electricity .....	\$1,000.. 45 284
Contract work .....	\$1,000.. 85 126
Quantity of electricity purchased for heat and power .....	1,000 kWh.. 725 342
Quantity of electricity generated less sold for heat and power .....	1,000 kWh.. -
Total value of shipments .....	\$1,000.. 2 128 576
Primary products value of shipments .....	\$1,000.. 2 017 142
Secondary products value of shipments .....	\$1,000.. 96 338
Total miscellaneous receipts .....	\$1,000.. 15 096
Value of resales .....	\$1,000.. 11 364
Contract receipts .....	\$1,000.. D
Other miscellaneous receipts .....	\$1,000.. D
Primary products specialization ratio .....	percent.. 95
Value of primary products shipments made in all industries .....	\$1,000.. 2 153 577
Value of primary products shipments made in this industry .....	\$1,000.. 2 017 142
Value of primary products shipments made in other industries .....	\$1,000.. 136 435
Coverage ratio .....	percent.. 94
Value added .....	\$1,000.. 1 429 418
Total inventories, beginning of year .....	\$1,000.. 237 789
Finished goods inventories .....	\$1,000.. 41 510
Work-in-process inventories .....	\$1,000.. 127 429
Materials and supplies inventories .....	\$1,000.. 68 850
Total inventories, end of year .....	\$1,000.. 219 174
Finished goods inventories .....	\$1,000.. 41 414
Work-in-process inventories .....	\$1,000.. 113 966
Materials and supplies inventories .....	\$1,000.. 63 794
Gross value of depreciable assets (acquisition costs) at beginning of year .....	\$1,000.. 1 102 275
Total capital expenditures (new and used) .....	\$1,000.. '79 606
Buildings and other structures (new and used) .....	\$1,000.. '13 635
Machinery and equipment (new and used) .....	\$1,000.. '65 971
Automobiles, trucks, etc., for highway use .....	\$1,000.. '1 488
Computers and peripheral data processing equipment .....	\$1,000.. '3 959
All other expenditures for machinery and equipment .....	\$1,000.. '60 524
Total retirements .....	\$1,000.. '33 767
Gross value of depreciable assets at end of year .....	\$1,000.. '1 148 114
Depreciation charges during year .....	\$1,000.. '67 000
Total rental payments .....	\$1,000.. 17 154
Buildings and other structures .....	\$1,000.. 7 803
Machinery and equipment .....	\$1,000.. 9 351
Total other expenses <sup>4</sup> .....	\$1,000.. 140 155
Response coverage ratio <sup>5</sup> .....	percent.. 84
Repair and maintenance services of buildings and/or machinery <sup>4</sup> .....	\$1,000.. 30 182
Communications services <sup>4</sup> .....	\$1,000.. 2 937
Legal services <sup>4</sup> .....	\$1,000.. 1 161
Accounting, auditing, and bookkeeping services <sup>4</sup> .....	\$1,000.. 1 837
Advertising and promotional services <sup>4</sup> .....	\$1,000.. 639
Expensed computer hardware and supplies and purchased computer services <sup>4</sup> .....	\$1,000.. 2 988
Refuse removal (including hazardous waste) services <sup>4</sup> .....	\$1,000.. 5 344
Management consulting and administrative services <sup>4</sup> .....	\$1,000.. 5 576
Taxes and license fees <sup>4</sup> .....	\$1,000.. 5 297
All other expenses <sup>4</sup> .....	\$1,000.. 84 194

<sup>1</sup>For the census, a company is defined as a business organization consisting of one establishment or more under common ownership or control.

<sup>2</sup>Includes establishments with payroll at any time during the year.

<sup>3</sup>Number of employees figures represent average number of production workers for pay period that includes the 12th of March, May, August, and November plus other employees for payroll period that includes the 12th of March.

<sup>4</sup>Based on 2002 Annual Survey of Manufactures (ASM) sample data.

<sup>5</sup>A response coverage ratio is derived for this item by calculating the ratio of the weighted employment (establishment data multiplied by sample weight) for those Annual Survey of Manufactures (ASM) establishments that reported to the weighted total employment for all ASM establishments classified in this industry.

Note 1: The amounts shown for other expenses reflect only those services that establishments purchase from other companies.

Note 2: The data in this table are based on the 2002 Economic Census and the 2002 Annual Survey of Manufactures (ASM). To maintain confidentiality, the Census Bureau suppresses data to protect the identity of any business or individual. The census results in this table contain sampling errors and nonsampling errors. Data users who create their own estimates using data from American FactFinder tables should cite the Census Bureau as the source of the original data only. For explanation of terms, see Appendix A. For full technical documentation, see Appendix C.

**Table 4. Industry Statistics by Employment Size: 2002**

[Data based on the 2002 Economic Census. For information on confidentiality protection, nonsampling error, and explanation of terms, see note at end of table. For meaning of abbreviations and symbols, see introductory text]

Employment size class	E <sup>1</sup>	All establishments <sup>2</sup>	All employees		Production workers			Value added (\$1,000)	Total cost of materials (\$1,000)	Total value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Number <sup>3</sup>	Payroll (\$1,000)	Number <sup>3</sup>	Hours (1,000)	Wages (\$1,000)				
331512, Steel investment foundries											
All establishments .....	—	146	16 420	571 464	12 801	25 252	399 628	1 429 418	685 599	2 128 576	'79 606
Establishments with—											
1 to 4 employees .....	9	19	39	1 258	30	60	928	4 662	1 800	6 465	'118
5 to 9 employees .....	9	6	39	1 332	32	65	1 021	4 414	1 724	6 138	'141
10 to 19 employees .....	5	13	179	6 302	140	286	4 217	20 086	7 633	27 655	D
20 to 49 employees .....	3	36	1 224	36 670	971	1 955	25 366	87 060	40 701	126 885	'7 915
50 to 99 employees .....	1	34	2 281	71 709	1 841	3 766	49 013	152 369	75 511	224 407	'11 069
100 to 249 employees .....	—	26	4 578	151 463	3 672	7 547	110 690	360 276	147 283	508 519	'18 073
250 to 499 employees .....	—	5	1 870	60 690	1 419	2 505	43 446	185 335	89 838	273 640	'9 576
500 to 999 employees .....	—	4	h	D	D	D	D	D	D	D	D
1,000 to 2,499 employees .....	—	3	h	D	D	D	D	D	D	D	D
2,500 employees or more .....	—	—	—	—	—	—	—	—	—	—	—
Administrative records <sup>4</sup> .....	9	31	163	5 506	132	265	4 194	18 197	7 034	25 231	'577

<sup>1</sup>Some payroll and sales data for small single-establishment companies with up to 20 employees (cutoff varied by industry) were obtained from administrative records of other government agencies rather than from census report forms. These data were then used in conjunction with industry averages to estimate statistics for these small establishments. This technique was also used for a small number of other establishments whose reports were not received at the time data were tabulated. The following symbols are shown where estimated data account for 10 percent or more of the figures shown: 1–10 to 19 percent; 2–20 to 29 percent; 3–30 to 39 percent; 4–40 to 49 percent; 5–50 to 59 percent; 6–60 to 69 percent; 7–70 to 79 percent; 8–80 to 89 percent; 9–90 percent or more.

<sup>2</sup>Includes establishments with payroll at any time during the year.

<sup>3</sup>Number of employees figures represent average number of production workers for pay period that includes the 12th of March, May, August, and November plus other employees for payroll period that includes the 12th of March.

<sup>4</sup>Some payroll and sales data for small single-establishment companies with up to 20 employees (cutoff varied by industry) were obtained from administrative records of other government agencies rather than from census report forms. These data were then used in conjunction with industry averages to estimate statistics for these small establishments. Data are also included in respective size classes shown.

Note: The data in this table are based on the 2002 Economic Census. To maintain confidentiality, the Census Bureau suppresses data to protect the identity of any business or individual. The census results in this table contain nonsampling errors. Data users who create their own estimates using data from American FactFinder tables should cite the Census Bureau as the source of the original data only. For explanation of terms, see Appendix A. For full technical documentation, see Appendix C.

**Table 5. Industry Statistics by Primary Product Class Specialization: 2002**

[Data based on the 2002 Economic Census. For information on confidentiality protection, nonsampling error, and explanation of terms, see note at end of table. For meaning of abbreviations and symbols, see introductory text]

Industry or product class code	Industry or primary product class	All establishments <sup>1</sup>	All employees		Production workers			Value added (\$1,000)	Total cost of materials (\$1,000)	Total value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Number <sup>2</sup>	Payroll (\$1,000)	Number <sup>2</sup>	Hours (1,000)	Wages (\$1,000)				
331512	Steel investment foundries . . . . .	146	16 420	571 464	12 801	25 252	399 628	1 429 418	685 599	2 128 576	'79 606
3315120	Steel investment castings . . . . .	146	16 420	571 464	12 801	25 252	399 628	1 429 418	685 599	2 128 576	'79 606

<sup>1</sup>Includes establishments with payroll at any time during the year.

<sup>2</sup>Number of employees figures represent average number of production workers for pay period that includes the 12th of March, May, August, and November plus other employees for payroll period that includes the 12th of March.

Note: The data in this table are based on the 2002 Economic Census. To maintain confidentiality, the Census Bureau suppresses data to protect the identity of any business or individual. The census results in this table contain nonsampling errors. Data users who create their own estimates using data from American FactFinder tables should cite the Census Bureau as the source of the original data only. For explanation of terms, see Appendix A. For full technical documentation, see Appendix C.

Table 6a. **Products Statistics: 2002 and 1997**

[Includes quantity and value of products of this industry produced by (1) establishments classified in this industry (primary) and (2) establishments classified in other industries (secondary). Transfers of products of this industry from one establishment of a company to another establishment of the same company (interplant transfers) are also included. Data based on the 2002 Economic Census. For information on confidentiality protection, nonsampling error, and explanation of terms, see note 2 at end of table. For meaning of abbreviations and symbols, see introductory text]

Product code	Product	Number of companies with shipments of \$100,000 or more	Quantity of production for all purposes	Product shipments	
				Quantity	Value (\$1,000)
331512	Steel investment foundries .....	2002.. N	X	X	2 153 577
	1997.. N	N	X	X	2 231 809
3315120	Steel investment castings .....	2002.. N	X	X	2 153 577
	1997.. N	N	X	X	2 231 809
33151201	Carbon and alloy steel investment castings .....	2002.. N	X	X	796 090
	1997.. N	N	X	X	801 461
3315120101	Carbon (including low alloy) steel investment castings <sup>1</sup> .....	2002.. 69	X	X	567 110
	1997.. 79	N	X	X	524 259
3315120106	Alloy (excluding stainless) steel investment castings <sup>1</sup> .....	2002.. 49	X	X	228 980
	1997.. 56	N	X	X	277 202
33151202	Hi-temp metal investment castings (iron, nickel, or cobalt-base alloys) .....	2002.. N	X	X	964 679
	1997.. N	N	X	X	987 152
3315120216	Hi-temp metal investment castings (iron, nickel, or cobalt-base alloys) .....	1,000 lb. 2002.. 34	X	S	964 679
	1997.. 44	N	X	S	987 152
33151203	Stainless steel investment castings .....	2002.. N	X	X	367 623
	1997.. N	N	X	X	423 426
3315120311	Stainless steel investment castings <sup>1</sup> .....	2002.. 75	X	X	367 623
	1997.. 103	N	X	X	423 426
3315120Y	Steel investment castings, nsk, total .....	2002.. N	X	X	25 185
	1997.. N	N	X	X	19 770
3315120YWW	Steel investment castings, nsk, for nonadministrative-record establishments .....	2002.. N	X	X	200
	1997.. N	N	X	X	236
3315120YWY	Steel investment castings, nsk, for administrative-record establishments .....	2002.. N	X	X	24 985
	1997.. N	N	X	X	19 534

<sup>1</sup>For additional detail, see Current Industrial Report MA331A, Iron and Steel Castings.

Note 1: For some establishments, data have been estimated from central unit values that are based on quantity-value relationships of reported data. The following symbols are used when percentage of each quantity figure estimated in this manner equals or exceeds 10 percent of published figure: p-10 to 19 percent estimated; q-20 to 29 percent estimated. If 30 percent or more is estimated, figure is replaced by S.

Note 2: The data in this table are based on the 2002 Economic Census. To maintain confidentiality, the Census Bureau suppresses data to protect the identity of any business or individual. The census results in this table contain nonsampling errors. Data users who create their own estimates using data from American FactFinder tables should cite the Census Bureau as the source of the original data only. For explanation of terms, see Appendix A. For full technical documentation, see Appendix C.



Table 6b. **Product Class Shipments for Selected States: 2002 and 1997**

[Not applicable for this report.]

**Table 7. Materials Consumed by Kind: 2002 and 1997**

[Includes quantity and cost of materials consumed or put into production by establishments classified only in this industry. Data based on the 2002 Economic Census. For information on confidentiality protection, nonsampling error, and explanation of terms, see note 2 at end of table. For meaning of abbreviations and symbols, see introductory text]

Material code	Material consumed	Quantity	Delivered cost (\$1,000)
331512	Steel investment foundries		
00900001	Total materials .....2002..	X	527 622
	.....1997..	X	533 555
33120044	Pig iron shapes and forms (excluding silvery iron, castings, forgings, and fabricated metal products) .....2002..	X	671
	.....1997..	X	N
33111204	Ferrochromium shapes and forms (excluding castings, forgings, and fabricated metal products) .....2002..	X	3 322
	.....1997..	X	N
33111202	Ferromanganese, silicomanganese, and manganese shapes and forms (excluding castings, forgings, and fabricated metal products) .....2002..	X	651
	.....1997..	X	N
33111206	Ferrosilicon (more than 8 percent silicon) shapes and forms (excluding castings, forgings, and fabricated metal products) .....2002..	X	1 179
	.....1997..	X	N
33100013	All other ferrous shapes and forms (excluding castings, forgings, and fabricated metal products) .....2002..	X	17 711
	.....1997..	X	29 489
33141924	Nickel and nickel-base alloy shapes and forms (excluding castings, forgings, and fabricated metal products) .....2002..	X	83 346
	.....1997..	X	N
33141947	Cobalt-base alloy shapes and forms (excluding castings, forgings, and fabricated metal products) .....2002..	X	36 028
	.....1997..	X	36 769
33141905	All other nonferrous shapes and forms (excluding castings, forgings, and fabricated metal products) .....2002..	X	7 094
	.....1997..	X	32 879
00190027	Iron and steel scrap (excluding home scrap) .....2002..	X	26 671
	.....1997..	X	N
00190082	All other purchased scrap, excluding home scrap .....2002..	X	3 130
	.....1997..	X	2 990
32712400	Clay refractories .....2002..	X	2 605
	.....1997..	X	3 243
32791001	Grinding wheels and other abrasive products, excluding industrial diamonds .....2002..	X	14 214
	.....1997..	X	19 670
32712500	Nonclay refractories .....2002..	X	22 720
	.....1997..	X	26 592
32700009	All other stone, clay, glass, and concrete products .....2002..	X	2 620
	.....1997..	X	3 337
33299700	Industrial patterns .....2002..	X	4 151
	.....1997..	X	3 450
33350003	Industrial dies, molds, jigs, and fixtures .....2002..	X	16 502
	.....1997..	X	18 001
001900A5	All other industrial and commercial machinery and computer equipment .....2002..	X	14 122
	.....1997..	X	3 628
21232005	Sand .....2002..	X	16 792
	.....1997..	X	12 298
00970099	All other materials and components, parts, containers, and supplies .....2002..	X	251 505
	.....1997..	X	333 511
00971000	Materials, ingredients, containers, and supplies, nsk .....2002..	X	2 588
	.....1997..	X	7 698

Note 1: For some establishments, data have been estimated from central unit values that are based on quantity-value relationships of reported data. The following symbols are used when percentage of each quantity figure estimated in this manner equals or exceeds 10 percent of published figure: p-10 to 19 percent estimated; q-20 to 29 percent estimated. If 30 percent or more is estimated, figure is replaced by S.

Note 2: The data in this table are based on the 2002 Economic Census. To maintain confidentiality, the Census Bureau suppresses data to protect the identity of any business or individual. The census results in this table contain nonsampling errors. Data users who create their own estimates using data from American FactFinder tables should cite the Census Bureau as the source of the original data only. For explanation of terms, see Appendix A. For full technical documentation, see Appendix C.